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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,969	08/01/2007	Robert Charles Sutton	1281-173PUS (F-30037US)	2719
70757	7590	04/05/2012	EXAMINER	
Christopher & Weisberg, P.A. 200 East Las Olas Boulevard Suite 2040 Fort Lauderdale, FL 33301			LEE, SI M	
			ART UNIT	PAPER NUMBER
			3775	
			NOTIFICATION DATE	DELIVERY MODE
			04/05/2012	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ptomail@cwiplaw.com

Office Action Summary	Application No. 10/598,969	Applicant(s) SUTTON ET AL.	
	Examiner SI LEE	Art Unit 3775	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2012.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1-18 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1-18 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/7/12 has been entered.

Status of the Claims

2. This Office Action is responsive to the request for continued examination filed on 3/7/12. As directed by the amendment: Claims 10 and 12 have been amended. Claims 15-18 are newly added. Claims 1-18 are presently pending in this application.

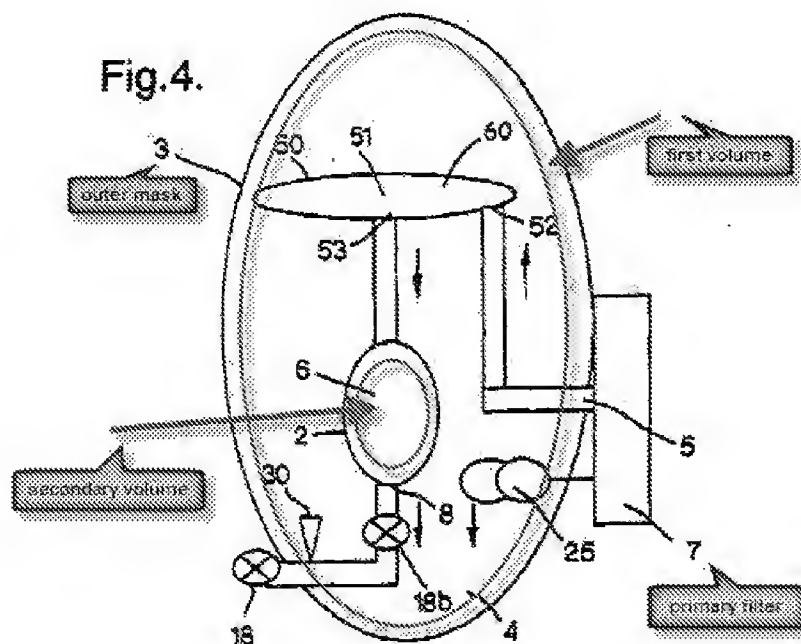
Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3 and 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson et al. (7,013,891), herein referred as Richardson and in view of Tayebi (4,945,907).

Regarding claim 1, Richardson discloses a respirator having an outer mask (3) defining a first volume (see figure 4 below), an oronasal mask (2) defining a second volume (see figure 4 below), the oronasal mask (2) being positioned within the first volume (the first volume is considered as the volume excluding the secondary volume), and a primary filter (7) wherein the primary filter (7) being affixed to the outer mask (3) (column 4 lines 2-3).



Next, Richardson's respirator has a conduit connecting the visor (50) and the oronasal mask (2). Yet, Richardson's respirator lacks a secondary filter positioned within the first volume, the secondary filter filtering air traveling from the first volume to the second volume.

However, Tayebi teaches a filter can be provided to an oronasal mask (column 7 lines 31-35) and further teaches that the mask is able to incorporate two filters, since

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using two filters, selective combinations of gases, dusts, or mists may be filtered (Abstract lines 16-18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Richardson's respirator having a conduit with a filter liner as taught by Tayebi, since providing an additional filter would benefit in greater filtration than selecting one filter and would result in purified air before the user inhales the air.

Thus, the modified Richardson's respirator has a secondary filter (filter of Tayebi) positioned within the first volume (figure 4 above of Richardson), the secondary filter filtering air traveling from the first volume to the second volume (figure 4 above of Richardson).

Regarding claim 2, the modified Richardson's respirator has the secondary filter (17 of Tayebi) filtering air traveling around a portion of the second volume (figure 4 of Richardson), the secondary filter having a filter inlet for receiving air and a filter outlet for outputting air (see figure 7 below of Tayebi's filter).

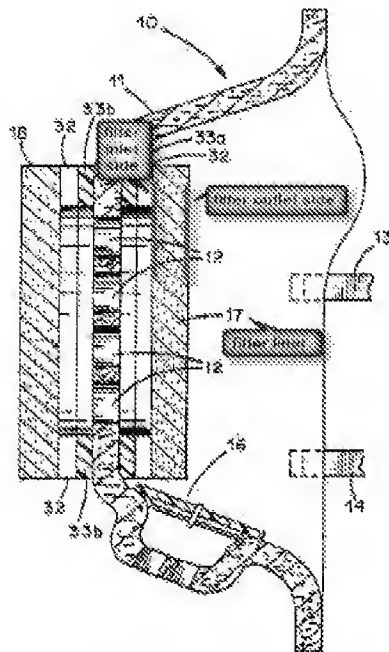


Fig. 7.

Regarding claim 3, the modified Richardson's respirator has a primary inlet port (5 of Richardson) allowing air to be drawn into the first volume from the primary air filter (7 of Richardson), the primary inlet port (5 of Richardson) positioned on the outer mask (3 of Richardson) (see figure 4 of Richardson).

Regarding claim 12, the modified Richardson's respirator has an exhale valve (30 of Richardson) allowing air to travel from the secondary volume to the exterior of the outer mask (3) (see figure 4 of Richardson).

Regarding claim 13, the modified Richardson's respirator has the oronasal mask (2 of Richardson) arranged to form a seal against a wearer's face such that the secondary volume forms a separate self contained volume (6 of Richardson) within the first volume when sealed against the wearer's face (see figure 4 of Richardson above).

Regarding claim 14, the modified Richardson's respirator has a visor (50) positioned within the first volume such that air traveling around the secondary volume passes proximate the visor (50) (see figure 4 of Richardson above).

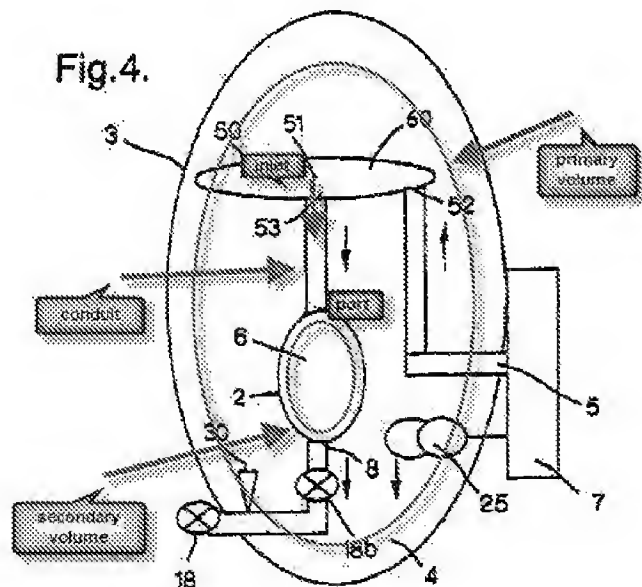
Regarding claim 15, Richardson discloses an outer mask (3) defining a first volume (see figure 4 above), the outer mask (3) having a visor (50), an oronasal mask (2) defining a second volume (see figure 4 above), the oronasal mask (2) being positioned within the first volume (the first volume is considered as the volume excluding the secondary volume), and a primary filter (7) wherein the primary filter (7) being affixed to the outer mask (3) (column 4 lines 2-3).

Next, Richardson's respirator has a conduit connecting the visor (50) and the oronasal mask (2). Yet, Richardson's respirator lacks a secondary filter positioned within the first volume. However, Tayebi teaches a filter can be provided to an oronasal mask (column 7 lines 31-35) and further teaches that the mask is able to incorporate two filters, since using two filters, selective combinations of gases, dusts, or mists may be filtered (Abstract lines 16-18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Richardson's respirator having a conduit with a filter liner as taught by Tayebi, since providing an additional filter would benefit in greater filtration than selecting one filter and would result in purified air before the user inhales the air.

Thus, the modified Richardson's respirator has the secondary filter (filter of Tayebi) configured to filter air traveling around the oronasal mask (2 of Richardson) and across the visor (50 of Richardson).

Regarding claim 16, the modified Richardson's respirator has a first portion wherein the first portion has an inlet at a first end and a second portion coupled to the oronasal mask (2 of Richardson) at a second end opposite the first end (see figure 4 below), and the secondary filter (filter of Tayebi) being positioned within the filter conduit.

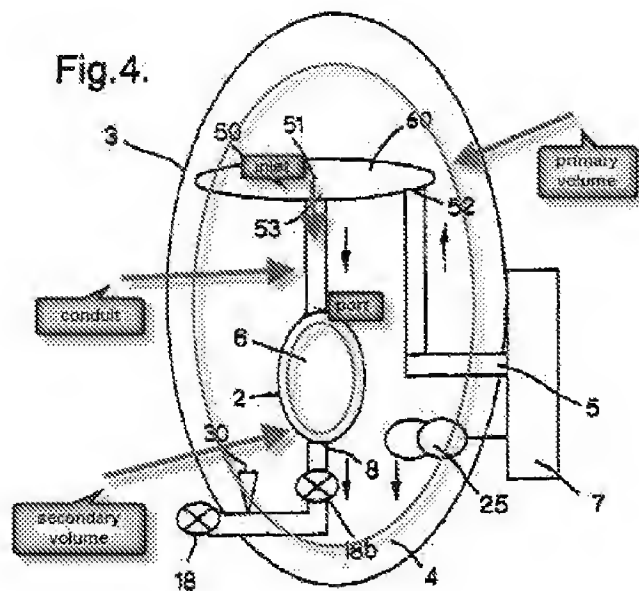


5. Claims 4, 5, and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson and Tayebi as applied to claims 1 and 3 above, and further in view of Keifer et al. (7,261,104), herein referred to as Keifer.

Regarding claim 4, the modified Richardson's respirator discloses all the features/elements as claimed including an inlet port (5 of Richardson) but lacks a one way valve allowing air to travel from the primary inlet port to the first volume. However, figure 1C of Keifer et al. teaches a one way valve (480 - one way check valve) to allow inspired air through passage (460) but prevent expired air from passage (460) (column 6 lines 57-64). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the modified Richardson's air inlet with a one way valve as taught by Keifer, since such a modification would prevent air from escaping the inlet port and keep the air distributed within the mask. The modified Richardson's respirator has the one valve (480 of Keifer) preventing air traveling into the primary filter (7 of Richardson) from the first volume.

Regarding claim 5, the modified Richardson's respirator has the one way valve (480 of Keifer) accepting air flow from the primary filter (7 of Richardson).

Regarding claim 8, the modified Richardson's respirator has a secondary inlet (see figure 4 of Richardson below) allowing air to travel from the first volume to the secondary filter (17 of Tayebi).



Regarding claim 9, the modified Richardson's respirator has a secondary port on the oronasal mask (2 of Richardson), a conduit having a first portion including the secondary inlet and a second portion coupled to the secondary port (see figure 4 of Richardson above).

6. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson and Tayebi as applied to claim 1 above, and further in view of Bee (7,089,931).

Regarding claim 6, the modified Richardson's respirator discloses all the features/elements as claimed except for another one way valve allowing air to travel into the secondary volume from the first volume. However, figure 1 of Bee teaches a one way valve (11 – non return valve) within the inlet duct (9) to the oronasal mask (column

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3 lines 25-26). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the modified Richardson's mask with a one way valve placed at the inlet of the oronasal mask and within the inlet duct as taught by Bee, since such a modification would prevent air from escaping the inlet port and keep the air distributed within the oronasal mask. The modified Anderson's respirator has the one way valve (11 of Bee) preventing air from traveling into the first volume from the secondary volume (see figure 4 of Richardson).

Regarding claim 7, the modified Richardson's respirator has the one way valve (11 of Bee) accepting air traveling from the secondary filter (filter of Tayebi).

7. Claims 1, 3, and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bee (7,089,931) in view of Richardson et al. (7,013,891) and further in view of Tayebi (4,945,907).

Regarding claim 1, Bee discloses an outer mask (1) defining a first volume (see figure 1 below), an oronasal mask (3) defining a second volume (see figure 1 below), and the oronasal mask being positioned within the first volume (the first volume is considered as the volume excluding the secondary volume).

Yet, the modified Bee's respirator further lacks a secondary filter positioned within the first volume, the secondary filter filtering air traveling from the first volume to the second volume. However, Tayebi teaches a filter can be provided to an oronasal mask (column 7 lines 31-35) and further teaches that the mask is able to incorporate two filters, since using two filters, selective combinations of gases, dusts, or mists may

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be filtered (Abstract lines 16-18). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the modified Bee's respirator with a secondary filter liner as taught by Tayebi, since providing an additional filter would benefit in greater filtration than selecting one filter and would result in purified air before the user inhales the air.

Regarding claim 3, the modified Bee's respirator has a primary inlet port allowing air to be drawn into the first volume (see figure 1 of Bee above) from the primary air filter (7 of Richardson), the primary inlet port positioned on the outer mask (see figure 1 of Bee above).

Regarding claim 8, the modified Bee's respirator has a secondary inlet allowing air to travel from the first volume (figure 1 of Bee) to the secondary filter (filter of Tayebi).

Regarding claim 9, the modified Bee's respirator has a secondary port located on the oronasal mask (3 of Bee) and a conduit having a first portion (8), the first portion including an inlet at a first end and a second portion (9) coupled to the secondary port (figure 1 of Bee).

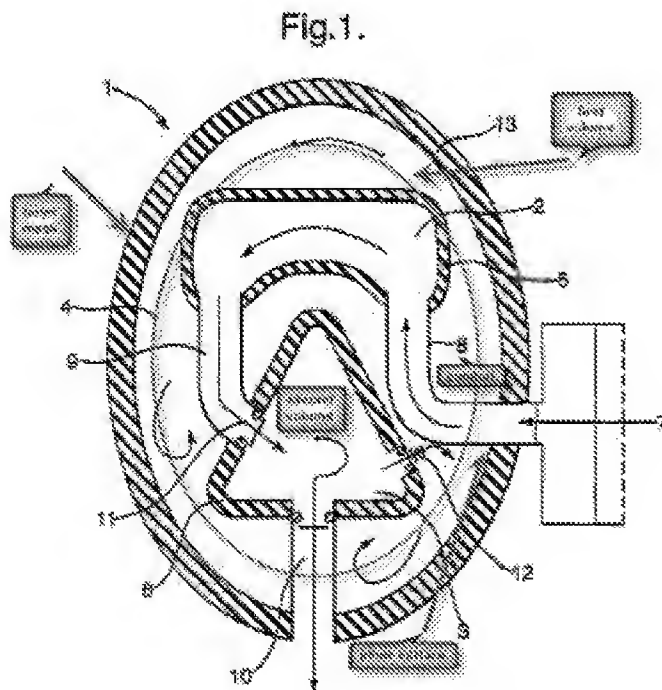
Regarding claim 10, the modified Bee's respirator has at least a portion of the conduit (8 and 9 of Bee) is positioned against an inner surface of the outer mask (1 of Bee) (See figure 1 above of Bee).

Regarding claim 11, the modified Bee's respirator has the secondary filter (filter of Tayebi) positioned within the conduit (8 and 9).

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8. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bee (7,089,931) in view of Richardson et al. (7,013,891).

Regarding claim 17, Bee discloses an outer mask (1) defining a first volume (see figure 1 below), the outer mask having an inner surface (see figure 1 below), an oronasal mask (3) defining a second volume (see figure 1 below), and the oronasal mask being positioned within the first volume (the first volume is considered as the volume excluding the secondary volume). Figure 1 of Bee shows a conduit having a first portion (8), the first portion including an inlet at a first end and a second portion (9) coupled to the oronasal mask (3) at a second end opposite the first end, at least a portion of the conduit being positioned against the inner surface of the outer mask (1) (see figure 1 below).



Yet, Bee is silent on a primary filter, the primary filter being affixed to the outer mask. However, Richardson teaches a filter 7 affixed to the outer mask 3 for filtering the inhaling air shown in figure 4 (column 4 lines 1-3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Bee's respirator with a filter as taught by Richardson, since such a modification would provide the user with air-purifying air for inhalation.

9. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bee and Richardson as applied to claim 17 above, and further in view of Tayebi (4,945,907).

Regarding claim 18, the modified Bee's respirator discloses all the features/elements including a conduit (figure 1 of Bee) as claimed except for a secondary filter positioned within the filter conduit, the secondary filter filtering air traveling from the first volume to the second volume. However, Tayebi teaches a filter can be provided to an oronasal mask (column 7 lines 31-35) and further teaches that the mask is able to incorporate two filters, since using two filters, selective combinations of gases, dusts, or mists may be filtered (Abstract lines 16-18). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the modified Bee's respirator having a conduit with a filter liner as taught by Tayebi, since providing an additional filter would benefit in greater filtration than selecting one filter and would result in purified air before the user inhales the air.

Response to Arguments

10. Applicant's arguments filed 3/7/12 have been fully considered but they are not persuasive.

Applicant argues on pg 8, paragraph 3, of the remarks that that there is no motivation for placing Tayebi's internal filter liner 17 which is sandwiched with external filter liner at an inlet port to the mask as a whole, within Richardson's conduit and uses impermissible hindsight to modify Richardson with Tayebi. However, examiner respectfully disagrees because the reference Tayebi explicitly teaches that by using two filters in a face mask, selective combinations of noxious and poisonous gases, dusts, or mists may be filtered from breathed air (abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Richardson's respirator with an additional filter as taught by Tayebi because it would benefit in greater filtration than selecting one filter and would result in purified air before the user inhales the air.

Furthermore, in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Applicant further argues on pg. 9, paragraph 5, of the remarks that Tayebi's single filter as illustrated in figure 3 does not teach or suggest applicant's second filter. Examiner agrees figure 3 of Tayebi shows a single filter. However, the reference Tayebi explicitly teaches a face mask provided with two filters. Thus, the modified Richardson's respirator has the cited features of claim 1, see Office Action above.

In response to applicant's argument that there is no teaching, suggestion, or motivation to combine the references, the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007). In this case, applicant argues on pgs 11 and 12 of the remarks on the references of Keifer and Bee failing to teach or suggests "the secondary filter is provided to filter gas passing from the main volume to the secondary volume" as recited in claim 1. However, the references Richardson and Tayebi are used to teach the features of claim 1.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fehlaue (5,323,774) is cited to show an outer mask with an oronasal mask. Stern et al. (5,372,130) is cited to show a face mask having two filters.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to SI LEE whose telephone number is (571)270-5450. The examiner can normally be reached on Monday-Friday 8:30am-6pm, working alternating Friday's.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Barrett can be reached on (571)272-4746. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SI LEE/
Examiner, Art Unit 3775

/Thomas C. Barrett/
Supervisory Patent Examiner, Art
Unit 3775